Serial No. 08/474,416

IN THE CLAIMS:

Please amend the claims as follows:

9. (Amended) A motion video architecture data path for providing a motion picture window within a flat panel display, comprising:

a formatter that formats supplied image data into a format containing a luminance value for pixels within the image data;

a brightness adjuster that adds a brightness value to the luminance value of pixels to produce brightness adjusted pixels of the image data; and

a color space converter that converts the format of the brightness adjusted pixels to a format renderable by [a] said flat panel display [device].

10. (Amended) [The motion video architecture data of Claim 9, path wherein the brightness adjuster includes:] A motion video architecture data path for providing a motion picture window within a display, comprising:

a formatter that formats supplied image data into a format containing a luminance value for pixels within the image data;

a brightness adjuster that adds a brightness value to the luminance value of pixels to produce brightness adjusted pixels of the image data; and

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a color space converter that converts the format of the brightness adjusted pixels to a format renderable by a display device, in which the brightness adjuster includes:

an adder that adds the brightness value to the luminance values of the pixels to produce the brightness adjusted pixels and a carry-out signal;

a lower clamp circuit that receives the carry-out signal and at least one bit of the brightness value and clamps any brightness adjusted pixel to a lowest output pixel value when the carry-out signal and the at least one bit of the brightness value indicate that addition of the brightness value to the luminance values of that pixel produces a brightness adjusted pixel value below the lowest output pixel value; and

an upper clamp circuit that receives the carry-out signal and at least one bit of the brightness value and clamps any brightness adjusted pixel to a highest output pixel value when the carry-out signal and the at least one bit of the brightness value indicate that addition of the brightness value to the luminance values of that pixel produces a brightness adjusted pixel value above the highest output pixel value.

12. (Amended) A graphics controller that receives image data from a video memory and controls display of images on a flat panel display, the graphics controller comprising:

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a video controller that produces a graphic presentation;

a computer graphics controller that controls graphics operations;

a sequencer coupled to the video controller and the computer graphics controller to control timing of the video controller and the computer graphics controller; and

a motion video architecture data path that receives the image data from the video memory and incorporates motion video into the graphic presentation produced by the video controller <u>for display on said flat panel display</u>, the motion video architecture data path including a brightness adjuster that adds a brightness value to the value of pixels of the image data received from the video memory to produce brightness adjusted pixels of the image data received from the video memory.

13. (Amended) [The graphics controller of Claim 12, wherein] <u>A graphics controller that receives image data from a video memory and controls display of images on a display, the graphics controller comprising:</u>

<u>a video controller that produces a graphic presentation;</u>

<u>a computer graphics controller that controls graphics operations;</u>

a sequencer coupled to the video controller and the computer graphics controller to control timing of the video controller and the computer graphics controller; and

a motion video architecture data path that receives the image data from the video memory and incorporates motion video into the graphic presentation produced by the video controller, the motion video architecture data path including a brightness adjuster that adds a brightness value to the value of pixels of the image data received from the video memory to produce brightness adjusted pixels of the image data received from the video memory, in which the brightness adjuster includes:

an adder that adds the brightness value to the value of pixels to produce the brightness adjusted pixels and a carry-out signal;

a lower clamp circuit that receives the carry-out signal and at least one bit of the brightness value and clamps any brightness adjusted pixel to a lowest output pixel value when the carry-out signal and the at least one bit of the brightness value indicate that addition of the brightness value to the value of that pixel produces a brightness adjusted pixel value below the lowest output pixel value; and

an upper clamp circuit that receives the carry-out signal and at least one bit of the brightness value and clamps any brightness adjusted pixel to a highest output pixel value when the carry-out signal and the at least one bit of the brightness value indicate

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that addition of the brightness value to the value of that pixel produces a brightness adjusted pixel value above the highest output pixel value.

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15. (Amended) A system comprising:

a <u>flat panel</u> display that receives image data and produces a visible image display;

a video memory that stores the image data;

a computer that provides the image data to the video memory; and

a graphics controller that retrieves the image data stored in the video memory and supplies the image data to the <u>flat panel</u> ~~display~~, the graphics controller including a brightness adjuster that adds a brightness value to the values of pixels of the image data received from the video memory to produce brightness adjusted pixels of the image data received from the video memory.

16. (Amended) [The system of claim 15, wherein] <u>A system comprising:</u>

<u>a display that receives image data and produces a visible image display;</u>

<u>a video memory that stores the image data;</u>

<u>a computer that provides the image data to the video memory;</u> <u>and</u>

a graphics controller that retrieves the image data stored in the video memory and supplies the image data to the display, the graphics controller including a brightness adjuster that adds a brightness value to the values of pixels of the image data received from the video memory to produce brightness adjusted pixels of the image data received from the video memory in which the brightness adjuster includes:

an adder that adds the brightness value to the value of a pixel to produce the brightness adjusted pixels and a carry-out signal;

a lower clamp circuit that receives the carry-out signal and at least one bit of the brightness value and clamps any brightness adjusted pixel to a lowest output pixel value when the carry-out signal and the at least one bit of the brightness value indicate that addition of the brightness value to the value of that pixel produces a brightness adjusted pixel value below the lowest output pixel value; and

an upper clamp circuit that receives the carry-out signal and at least one bit of the brightness value and clamps any brightness adjusted pixel to a highest output pixel value when the carry-out signal and the at least one bit of the brightness value indicate that addition of the brightness value to the value of that pixel produces a brightness adjusted pixel value above the highest output pixel value.

19 20. (Amended) [The method of Claim 19, wherein] A method of adjusting a brightness response of a display, comprising:

adding a brightness value to values of pixels in an image to be displayed to produce brightness adjusted pixels;

clamping values of any of the brightness adjusted pixels that fall below a lowest output pixel value to the lowest output pixel value, and values of any of the brightness adjusted pixels that are above a highest output pixel value to the highest output pixel value; and

providing the brightness adjusted pixels to the display, in which the step of adding includes adding in an adder the brightness value to the value of each pixel in the image to produce the brightness adjusted pixels and a carry-out signal.

21 22. (Amended) [The method of Claim 19, wherein] A method of adjusting a brightness response of a display, comprising:

adding a brightness value to values of pixels in an image to be displayed to produce brightness adjusted pixels;

clamping values of any of the brightness adjusted pixels that fall below a lowest output pixel value to the lowest output pixel value, and values of any of the brightness adjusted pixels that are above a highest output pixel value to the highest output pixel value; and

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<u>providing the brightness adjusted pixels to the display, in</u> <u>which</u> the image data is in a YUV format, and the values of the pixels to which the brightness values are added are luminance values.

REMARKS

Claims 1-26 remain in the application. Claims 1-8 and 24-26 stand allowed. Claims 9, 12, 15, 17 and 19 stand rejected. Claims 10, 11, 13, 14, 16, 18 and 20-23 have been objected to as dependent upon rejected claims but are otherwise allowable.

The Examiner objected to the declaration as not identifying the application by application number and filing date. A petition under 37 CFR 1.47(b) is attached hereto requesting that the assignee be accepted as the declarant of the new Declaration required by the Examiner.

The Examiner noted certain objections to the specification. We have made the amendments the Examiner requested. In addition, the Examiner noted that a number of misspellings occurred in the specification. We have reviewed the specification for spelling and believe that the application is now without substantial spelling errors.

The Examiner rejected claims 9, 12, 15, 17 and 19 under 35 U.S.C. § 103 as unpatentable over Malcolm, Jr. et al. in view of Bryden, Kageyama and Krivacic. Applicant respectfully traverses

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